



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re patent application of: Michael P. Naipawer III, Adam Chich and Murray Sherman

Title: ALUMINUM FACED SELF ADHERING MEMBRANE

Commissioner for Patents
Washington, D.C. 20231

INFORMATION DISCLOSURE STATEMENT
PURSUANT TO 37 CFR 1.97 and 1.98

Dear Sir:

In accordance with the suggested procedure of 37 CFR 1.97 and 1.98, Applicants are submitting herewith copies of all of the prior art references identified on the enclosed list, which are considered to comprise the closest prior art of which the undersigned attorney, the inventors and anyone else believed to have been substantially involved in the preparation of this application are aware. Each of these references will be discussed below in a brief paragraph.

1. U.S. Patent No. 4,936,938, issued to Simpson et al. on June 26, 1990, discloses a laminated roofing material having a laminate of five layers:

an uppermost surface layer of an aluminum foil 18 which is exposed to the sunlight and the environment;

an ionomer resin adhesive 22;

a polyethylene sheet 20, wherein the aluminum foil 18 and the polyethylene sheet 20 are bonded together by the ionomer resin adhesive 22;

a coating of bitumen 24 bonded to the surface of the polyethylene sheet; and

a release paper 26 applied to the exposed bitumen surface so that when the laminate is wound into a spiral roll the release paper prevents adherence of the bitumen layer to the aluminum layer.

2. U.S. Patent No. 5,096,759 (a CIP of U.S. Patent No. 4,936,938) issued to Simpson et al. on March 17, 1992, discloses a laminated roofing sheet comprising the layers listed in U.S. Patent No. 4,936,938 and additionally utilizes an underlayment 90 which is applied to the roof structure prior to applying the laminate thereto.

3. U.S. Patent No. 4,457,983, issued to Maile et al. on July 3, 1984, discloses a roofing sheet comprising a three layer laminate:

- a lower or inner asphalt layer, which faces the decking of the roof;
- an upper layer of ethylene vinyl acetate (EVA) which faces the outside environment; and
- a middle layer of rayon fibers sandwiched between the lower and upper layers.

The asphalt mechanically interlocks with or is embedded in the rayon fibers, as does EVA, so that there is a mechanical bond which stabilizes the laminate both dimensionally and against separation of the layers.

4. U.S. Patent No. 4,636,414 issued to Tajima et al. on January 13, 1987, discloses a laminate comprising five layers:

- a fibrous sheet (of cardboard, woven fabric, knitted fabrics, non-woven fabrics made of glass fibers, asbestos fiber, and synthetic fibers such as polyvinyl alcohol fiber, polypropylene fiber, polyester fiber, and polyamide fiber);

- first and second bituminous layers coated on both surfaces of the fibrous sheet;

- a synthetic resin sheet laminated on one of the bitumenous layers (of polyvinyl chloride, polyethylene, polypropylene, polyester, polycarbonate, polyvinyl alcohol, acrylic resins, ethylene-vinyl acetate copolymers and chlorinated polyethylene); and

- a mineral aggregate layer deposited on the opposite surface of the second bituminous layer.

5. U.S. Patent No. 4,911,975, issued to K. Schult on March 27, 1990, discloses a polymer bitumen web comprising a three layer laminate:

a fiber support (polyester fleece, glass fabric, glass fabric fleece, and needled fleece of synthetic fibers);

a sealing layer of black polymer bitumen which is both gas and moisture impermeable bonded to the underside of the fiber support and intended to face the deck of the roof; and

a cover layer bonded to the upper side of the fiber support made of polyolefins admixed with light color or white pigments highly reflective to sunlight.

6. U. S. Patent No. 3,581,779, issued to L.G. Sylvia, Jr. on June 1, 1971, discloses a roofing laminate comprising:

an opaque polyvinyl fluoride fiber; and

non-woven fiberglass mat impregnated with an asphaltic emulsion.

The asphaltic emulsion is forced through the non-woven fiberglass mat so that it adheres to the polyvinyl fluoride fiber.

7. U. S. Patent No. 3,909,144, issued to Garn et al. on September 30, 1975, discloses plastic sheet materials comprising:

a plastic film coated on both sides with a non-woven glass fiber fabric, said fabric being partially fused into the plastic film;

an asphalt layer on each glass fiber fabric; and

the surface of one asphalt layer is coated with a layer of crushed slate partially rolled into the asphalt layer.

8. U. S. Patent No. 5,737,897, issued to M. P. Naipawer, III on April 14, 1998, discloses an insulation board/waterproofing membrane composite comprising:

a rigid, dimensionally stable insulation board;

a tacky pressure sensitive sheet coating thereon comprising asphalt and styrene-butadiene-styrene (SBS) polymer suitable for cold adherence;

a release sheet on said coating; and


a non-adhesive waterproofing membrane placed onto the adhesive face of the board.

Suitable waterproofing membranes include SBS polymer/fiberglass base sheets.

None of the above-cited references disclose or suggest the present invention.

Respectfully submitted,

Date AUGUST 3, 2001



William J. Davis
Reg. No. 30,744

Address:
GAF MATERIALS CORPORATION
1361 Alps Road
Wayne, NJ 07470-3689
Tele: (973) 628-3529
Facsimile: (973) 628-3620